

SANFORD A. ANGELOS**DEA Senior Forensic Chemist (Ret)****EDUCATION**

- University of Illinois – Chicago M.Ed. - Research Evaluation (1985)
- University of Illinois – Chicago M.Sc. – Criminalistics (1975)
- University of Illinois – Chicago B.Sc. – Chemistry (1972)
- High school - Oak Park & River Forest High School
- Elementary. School - Henry D. Lloyd Chicago Public School

WORK EXPERIENCE

- Forensic Chemist Consultant Aris Associates Ltd. 2/06 to present
- Senior Forensic Chemist U.S.-Drug Enforcement Administration 3/89 to 1/06
- Visiting Forensic Chemist Nat'l Inst. of Police Science, Tokyo, Japan 8/96 to 11/96
- Forensic Chemist U.S.-Drug Enforcement Administration 1/76 to 3/89
- Associate Criminalist Illinois Dept. of Law Enforcement 7/75 to 1/76
- Teaching Assistant UIC Dept. of Criminal Justice 9/74 to 6/75

TEACHING

(see Appendix A)

- Adjunct Faculty - Science Institute - Columbia College 8/92 to present
- Adjunct Faculty - Dept. of Science - Columbia College 1/84 to 1/90
- Adjunct Faculty - Dept. of Chemistry -Roosevelt University 1/84 to 1/90
- Adjunct Faculty - College of Education – UIC 1/82 to 1/88
- Adjunct Faculty - Dept. of Criminal Justice – UIC 1/81 to 1/87

MEMBERSHIPS

(see Appendix B)

- American Chemical Society Member 1974
- American Academy of Forensic Sciences Fellow 1975
- Clandestine Laboratory Investigating Chemists Charter Member 1990
- Midwestern Association of Forensic Scientists In-Active 1976
- Canadian Society of Forensic Sciences Member 1982
- Forensic Science Society In-Active 1987

COURT TESTIMONY

- Over 300 times in State and Federal Courts
- Over 200 Clandestine Laboratory Investigations

CERTIFICATION

- DEA-Clandestine Laboratory Entry Team (CLET) [OSHA Certified 48 CFR 1910.120(q)]
- Bloodborne Pathogen Certified Instructor [Public Health Service]

PRESENTATIONS

(see Appendix C, E, F)

- Over 45 presentations and workshops to the various organizations listed above

PUBLICATIONS

(see Appendix D)

- Over 10 papers published

HONORS

- Certificate of Appreciation Award DEA 2004
- Special Act or Service DEA 2003
- Exceptional Performance DEA 1999
- Exceptional Performance DEA 1997
- Research Award for Foreign Specialists Japanese Government 1996
- Exceptional Performance DEA 1996
- 1996 Award of Merit Chicago Area Technological Societies
- Exceptional Performance DEA 1995
- Appreciation Award American Chemical Society 1995
- Appreciation Award (2nd) American Chemical Society 1995



APPENDIX A - ACADEMIC POSITIONS

COLUMBIA COLLEGE

SCIENCE and MATHEMATICS DEPARTMENT

56-2170-01SMW LifeSavers or Killers: The Story of Drugs
56-2749-01SM Scientific Investigation: Sherlock Holmes to the Courtroom
Various terms between January 1984 to June 1991
56-1280-01/02 Crime Lab Chemistry
Various terms between September 2006 to June 2007

SCIENCE INSTITUTE

60-4250-01SMW Crime Lab Chemistry
Various terms between January 1993 to June 2006

UNIVERSITY OF ILLINOIS - CHICAGO

DEPARTMENT OF CRIMINAL JUSTICE

CrJ 200 Criminalistics
CrJ 291 Introduction to Forensic Sciences
CrJ 314 Criminalistics Analytical Laboratory I
CrJ 315 Criminalistics Analytical Laboratory II
CrJ 460 Forensic Sciences Laboratory I
CrJ 461 Forensic Sciences Laboratory II
CrJ 464 Forensic Sciences Special Topics
Various terms between January 1981 to January 1987

COLLEGE OF EDUCATION

CIE 309 Consumer Drug Educations
CIE 310 Drug Evaluations
Various terms between January 1982 to January 1989

ROOSEVELT UNIVERSITY

CHEMISTRY DEPARTMENT

CHEM 311-10 Introduction to Forensic Sciences
CHEM 312-10 Forensic Drug Chemistry
CHEM 370-10 Forensic Chemistry

SOCIOLOGY DEPARTMENT

SOC 355-10 Criminology and Forensic Science
Various terms between January 1984 to August 1991

APPENDIX B - PROFESSIONAL AFFILIATIONS**AMERICAN CHEMICAL SOCIETY (Chicago Section)**

Distinguish Service Award Committees (Chair 2006)	(2002-2006)
Treasurer	(1998-2000)
Policy – Bylaw	(1998-2002)
Awards	(1998-1999)
Member of the Board of Directors	(1984-1995; 1996-1998; 2000-2002)
Chairman of the Professional Relations Committee	(1990-91; 1995-96)
Program Co-Chair	(1995-1997)
Past-Chairman of the Section	(1994-95)
Chairman of the Section	(1993-94)
Chairman-Elect of the Section	(1992-93)
Chairman of the Environmental Health & Safety Committee	(1987-1989)
Chairman of the W. Gibbs Arrangement Committee	(1985)
Chairman of the House Committee	(1984)
CHEMICAL BULLETIN	
Co-Editor	(1999-2001)
Editorial Board	(1982-1997)
Editor	(1987-89)

AMERICAN ACADEMY OF FORENSIC SCIENCES

By-laws Committee Member [a]	(1997-2006)
2007 Criminalistics Section Program Co-Chairman	(2006)
Criminalistics Section's AdHoc Membership Requirement Committee	(2004-2005)
Criminalistics Section's Historian	(1995-1998)
Criminalistics Section's Award Committee	(1993-1997)-Chairman (1993)
Chairman of the AdHoc Proceedings Committee [a]	(1992-94)
Chairman - Criminalistics Section	(1992)
Nominating Committee [a]	(1992)
Council [a]	(1991-1992)
Membership Committee [a]	(1991-1992)
Secretary - Criminalistics Section	(1991)
1991 Criminalistics Section Program Chairman	(1990)
Member of the AdHoc Publication Committee [s]	(1982)
Chairman of the Criminalistics Section Planning Committee	(1987-89)
[a] Academy position [s] Criminalistics Section position	
JOURNAL OF FORENSIC SCIENCES	
Editorial Review Board	(1985-2002)

MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS

Criminalistics Coordinator	(1985)
Member of the Executive Board	(1981-1983)
Meeting Program Coordinator	(1982)
MAFS BULLETIN	
Editor	(1981-1983)

COUNCIL OF FORENSIC SCIENCE EDUCATORS

Secretary -Treasurer	(1997-2002)
Interim Secretary-Treasurer	(1996)

APPENDIX C - PRESENTATIONS

MAY 1976 MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS

-A Study of the Criminalistic Identification of Lipstick Stains

OCT 1976 MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS

-Identification of Some Chemical Analogues and Positional Isomers of Methaqualone

FEB 1977 AMERICAN ACADEMY OF FORENSIC SCIENCES

-The Isolation and Identification of Precursors and Reaction Products In The Clandestine Manufacture of Methaqualone and Mecloqualone

SEPT1977 AMERICAN CHEMICAL SOCIETY

-Identification of Some Chemical Analogues and Positional Isomers of Methaqualone

OCT 1978 MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS

-The Isolation and Identification of Precursors and Reaction Products In The Clandestine Manufacture of Methaqualone and Mecloqualone

NOV 1979 MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS

-Distinguishing The Optical Isomers of Propoxyphene by Infrared Spectroscopy

FEB 1980 AMERICAN ACADEMY OF FORENSIC SCIENCES

-Identification and Quantitation of Barbiturates by Nuclear Magnetic Resonance

FEB 1981 AMERICAN ACADEMY OF FORENSIC SCIENCES

-Identification and Quantitation of Multiple Barbiturate Preparations By Nuclear Magnetic Resonance
-A Comparative Study on the Use of Shift Reagents in the NMR Determination of Methamphetamine and Amphetamine Enantiomers

MAY 1981 MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS

-Quantitation and Identification by Nuclear Magnetic Resonance

FEB 1982 AMERICAN ACADEMY OF FORENSIC SCIENCES

-The Analysis of P-2-P Synthetic Mixtures Obtained from Clandestine Laboratories
-Quantitation and Identification of Pharmaceutical Preparations by Nuclear Magnetic Resonance

FEB 1982 AMERICAN ACADEMY OF FORENSIC SCIENCES

-Characteristics of Forensic Science Faculty Within Criminal Justice Higher Education Programs

FEB 1983 AMERICAN ACADEMY OF FORENSIC SCIENCES

-Analysis of a "Simple" Synthesis of P-2-P from Its Alcohol

FEB 1984 AMERICAN ACADEMY OF FORENSIC SCIENCES

-Attitudes of Criminalists Towards The *Journal of Forensic Sciences*: A Survey Analysis
-The Synthesis of P-2-P from Allybenzene
-Clandestine Manufacture of 4-Bromo-2,5-Dimethoxyamphetamine

APPENDIX C – PRESENTATIONS (Continued)

OCT 1984 AMERICAN CHEMICAL SOCIETY (CHICAGO-SAFETY SYMPOSIUM)

- Liability and The Drug Laws

JAN 1985 AMERICAN CHEMICAL SOCIETY

- Clandestine Manufacture of 4-Bromo-2,5-Dimethoxyamphetamine

FEB 1985 AMERICAN ACADEMY OF FORENSIC SCIENCES

- An Evaluation of Research Attitudes and Productivity of Forensic Science Higher Education Faculty
- The Role of the Forensic Chemist in Clandestine Laboratory Investigations, Seizures and Prosecutions

FEB 1986 AMERICAN ACADEMY OF FORENSIC SCIENCES

- Distinguishing the Optical Isomers of Propoxyphene by Infrared Spectroscopy
- A Statistical Evaluation of Research Published in *The Journal of Forensic Sciences*

FEB 1987 AMERICAN ACADEMY OF FORENSIC SCIENCES

- Potential Safety Hazards in a Forensic Laboratory
- Identification of Clandestine Phencyclidine Mixtures by Capillary Gas Chromatography/Mass Spectrometry
- An Investigation of Phenyl-2-Propanone Reaction Mechanisms

AUG 1987 INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES

- Clandestine Manufacture of 4-Bromo-2,5-Dimethoxyamphetamine
- A Gas Chromatography/Mass Spectrometry System for the Identification of Clandestinely Produced Phencyclidine Preparations
- Quantitation and Identification of Pharmaceutical Preparation by Nuclear Magnetic Resonance

FEB 1988 AMERICAN ACADEMY OF FORENSIC SCIENCES

- Automated Analysis on High Pressure Liquid Chromatography, Precision, Accuracy, and Linearity
- Automated Analysis on Capillary Gas Chromatography, Precision, Accuracy, and Linearity
- Automated Analysis on a Mass Selective Detector
- Synthesis of Amphetamine from Toluene
- The Analysis of an Analogue of Methaqualone

OCT 1988 MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS

- Automated Instrumental Analysis

OCT 1988 CANADIAN SOCIETY OF FORENSIC SCIENCES

- Automated Analysis on High Pressure Liquid Chromatography, Precision, Accuracy, and Linearity
- Automated Analysis on Capillary Gas Chromatography, Precision, Accuracy, and Linearity
- Automated Analysis on a Mass Selective Detector

FEB 1989 AMERICAN ACADEMY OF FORENSIC SCIENCES

- NMR Examination of Cocaine and Heroin
- NMR Analysis of PCP Analogues

OCT 1989 MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS

- Automated Sampling for Gas Chromatography and for a Mass Selective Detector
- An Investigation of Phenyl-2-Propanone Reaction Mechanisms

APPENDIX C – PRESENTATIONS (Continued)

FEB 1990 AMERICAN ACADEMY OF FORENSIC SCIENCES

- Optimizing FT-NMR Pulse Patterns for Quantitation Measurements
- NMR Quantitation of Methamphetamine and Ephedrine Mixtures

OCT 1990 INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES

- Synthesis of Amphetamine from Toluene
- An Investigation of Phenyl-2-Propanone Reaction Mechanisms

FEB 1992 AMERICAN ACADEMY OF FORENSIC SCIENCES

- Clandestine Manufacture of Methadone

FEB 1993 AMERICAN ACADEMY OF FORENSIC SCIENCES

- An Unsuccessful Clandestine Synthesis of Amphetamine

AUG 1993 AMERICAN CHEMICAL SOCIETY

- Use of Gas Chromatography/Mass Spectrometry (GC/MS) in Non-science Major Course Laboratory Experiments
- Instrumentation of a Forensic Laboratory

SEPT 1993 CLANDESTINE LABORATORY INVESTIGATING CHEMISTS ASSOCIATION

- An Unsuccessful Clandestine Synthesis of Amphetamine

FEB 1994 AMERICAN ACADEMY OF FORENSIC SCIENCES

- Clandestine Synthesis of Fentanyl

AUG 1995 AMERICAN CHEMICAL SOCIETY

- Overview of Chemistry in the Forensic Sciences.
- Use of Forensic Sciences in Chemical Education

OCT 1995 MIDWESTERN ASSOCIATION OF FORENSIC SCIENTISTS

- An Unsuccessful Clandestine Synthesis of Amphetamine
- Clandestine Synthesis of Fentanyl
- Analysis of *d,l*-Methamphetamine (Workshop)

FEB 1996 AMERICAN ACADEMY OF FORENSIC SCIENCES

- Sodium-Ammonia Reduction of Ephedrine to Methamphetamine
- Analysis of Samples 4-Bromo-2,5-Dimethoxyphenethylamine (Nexus) an Analogue of 4-Bromo-2,5-Dimethoxyamphetamine (DOB)

AUG 1996 INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES

- An Unsuccessful Clandestine Synthesis of Amphetamine
- Clandestine Synthesis of Fentanyl
- Clandestine Manufacture of Methadone

FEB 1998 AMERICAN ACADEMY OF FORENSIC SCIENCES

- Lithium-Ammonia Reduction of Pseudoephedrine to Methamphetamine

APPENDIX C – PRESENTATIONS (Continued)

FEB 1999 AMERICAN ACADEMY OF FORENSIC SCIENCES
-Production Capabilities of Clandestine Methamphetamine Laboratories

AUG 1999 INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES
-Methamphetamine by the Birch Reduction

APPENDIX D – PUBLICATIONS-Journal

JOURNAL OF FORENSIC SCIENCES Volume 26, Number 4, Page 656

*Approaches To Drug Sample Differentiation II: Nuclear Magnetic Resonance Spectrometric Determination of Methamphetamine Enantiomers

JOURNAL OF FORENSIC SCIENCES Volume 26, Number 4, Page 793

*Identification of Some Chemical Analogues and Positional Isomers of Methaqualone

JOURNAL OF FORENSIC SCIENCES Volume 28, Number 3, Page 552

*Characteristics of Forensic Science Faculty within Criminal Justice Higher Education Programs

JOURNAL OF FORENSIC SCIENCES Volume 29, Number 4, Page 1187

*A Clandestine Approach To The Synthesis of P-2-P From Phenylpropenes

JOURNAL OF FORENSIC SCIENCES Volume 30, Number 1, Page 269

*An Evaluation of Criminalists' Attitudes Towards The *Journal of Forensic Sciences*

JOURNAL OF FORENSIC SCIENCES Volume 30, Number 4, Page 1022

*The Isolation and Identification of Precursors and Reaction Products In The Clandestine Manufacture of Methaqualone and Mecloqualone

JOURNAL OF FORENSIC SCIENCES Volume 35, Number 6, Page 1297

*The Identification of Precursors, Impurities, and By-Products In Clandestinely Produced Phencyclidine Preparations

JOURNAL OF FORENSIC SCIENCES Volume 36, Number 2, Page 358

*The Identification and Quantitation of Pharmaceutical Preparations By Nuclear Magnetic Resonance Spectroscopy

JOURNAL OF FORENSIC SCIENCES Volume 38, Number 2, Page 455

*The Structural Identification of a Methyl Analog of Methaqualone Via 2-Dimensional NMR Techniques

U.S. D.E.A. - MICROGRAM Volume XXII, Number 3, Page 38

*Hewlett Packard Programming for the MSD Chem Station: Part I. Standard Search & Print Program

U.S. D.E.A. - MICROGRAM Volume XXII, Number 3, Page 41

*Perkin Elmer Obey Programming for FT-IR with CDS-3 Software: Part I. Print Programs

U.S. D.E.A. - MICROGRAM Volume XXII, Number 10, Page 194

*Perkin Elmer Obey Programming for FT-IR with CDS-3 Software: Part II. Automated Scan-Save-Print Programs

CRIMINALISTICS: AN INTRODUCTION TO FORENSIC SCIENCES - LAB MANUAL (1989)

R. SAFERSTEIN, EDITOR EXPERIMENT #27 PAGE 217

"Determination of Lipstick Dyes by Thin-Layer Chromatography"

JOURNAL OF CHEMICAL EDUCATION June 1996 Volume 73, Number 6, Page 565

*Use of Gas Chromatography-Mass Spectroscopy (GC-MS) in Nonscience Major Course Laboratory Experiments

APPENDIX D – PUBLICATIONS-Proceedings

PROCEEDINGS OF THE 2006 POLICE AND SCIENCE INTERNATIONAL FORUM

* Clandestine Methamphetamine Laboratories Legal Perspectives and Analytical Procedures in the United States (in Chinese translation)

PROCEEDINGS OF THE AMERICAN ACADEMY OF FORENSIC SCIENCES Volume 2, Number 2

*Sodium-Ammonia Reduction of Ephedrine to Methamphetamine

PROCEEDINGS OF THE AMERICAN ACADEMY OF FORENSIC SCIENCES Volume 2, Number 2

*Analysis of Samples 4-Bromo-2,5-Dimethoxyphenethylamine (Nexus) an Analogue of 4-Bromo-2,5-Dimethoxyamphetamine (DOB)

PROCEEDINGS OF THE AMERICAN ACADEMY OF FORENSIC SCIENCES Volume 4, Number 4

*Lithium-Ammonia Reduction of Pseudoephedrine to Methamphetamine

PROCEEDINGS OF THE AMERICAN ACADEMY OF FORENSIC SCIENCES Volume 5, Number 5

*Production Capabilities of Clandestine Methamphetamine Laboratories

Current Topics in Forensic Science

PROCEEDINGS OF THE 14th MEETING OF THE INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES
Volume 2, page 310

*An Unsuccessful Clandestine Synthesis of Amphetamine

Current Topics in Forensic Science

PROCEEDINGS OF THE 14th MEETING OF THE INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES
Volume 2, page 312

*Clandestine Synthesis of Fentanyl

Current Topics in Forensic Science

PROCEEDINGS OF THE 14th MEETING OF THE INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES
Volume 2, page 374

*Clandestine Manufacture of Methadone

Current Topics in Forensic Science

PROCEEDINGS OF THE 15th MEETING OF THE INTERNATIONAL ASSOCIATION OF FORENSIC SCIENCES,
page 61

*Methamphetamine by the Birch Reduction

APPENDIX E – INVITED – GUEST PRESENTATIONS

(Note Presentations prior to 1/2000 not included)

March 2003 Michigan Science Teachers Association

50th Annual Meeting

-The Use of Forensic Sciences in Teaching Science

April 2003 Central Research and Creative Accomplishment Symposium

Central Missouri State University

-Analysis of Controlled Substances

APPENDIX F – WORKSHOP– PRESENTATIONS

(Note Workshops prior to 1/2000 not included)

November 2006	2006 Police and Science International Forum (Hangshou, China) Presenter- Clandestine Methamphetamine Laboratories
February 2005	American Academy of Forensic Sciences Annual Meeting Chair –Analysis of Samples from Clandestine Methamphetamine Laboratories
October 2004	Southwestern Association of Forensic Scientists Annual Meeting Chair –Clandestine Laboratory Production Capabilities Presenter -GC Quantitation & Validation Methodology
March 2004	Michigan Science Teachers Association Annual Meeting Presenter -Forensic Mysteries as a Way of Teaching
February 2004	American Academy of Forensic Sciences Annual Meeting Presenter -Drug Enforcement Administration – Forensic Drug Chemist Workshop
February 2004	American Academy of Forensic Sciences Annual Meeting Co-Chair –Bubble Bubble Boom Fires and Explosions in Clandestine Drug Laboratories